

Conference on New Challenges and Perspectives in Symplectic Field Theory

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Volumes of hyperbolic 3-manifolds

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Abstract

We outline a program for determining the low volume closed and cusped hyperbolic 3-manifolds and addressing the Thurston, Weeks, Matveev-Fomenko hyperbolic complexity conjecture that there is a close connection between low volume hyperbolic 3-manifolds and hyperbolic 3-manifolds with low combinatorial/topological complexity.

Joint work with Robert Meyerhoff and Peter Milley.